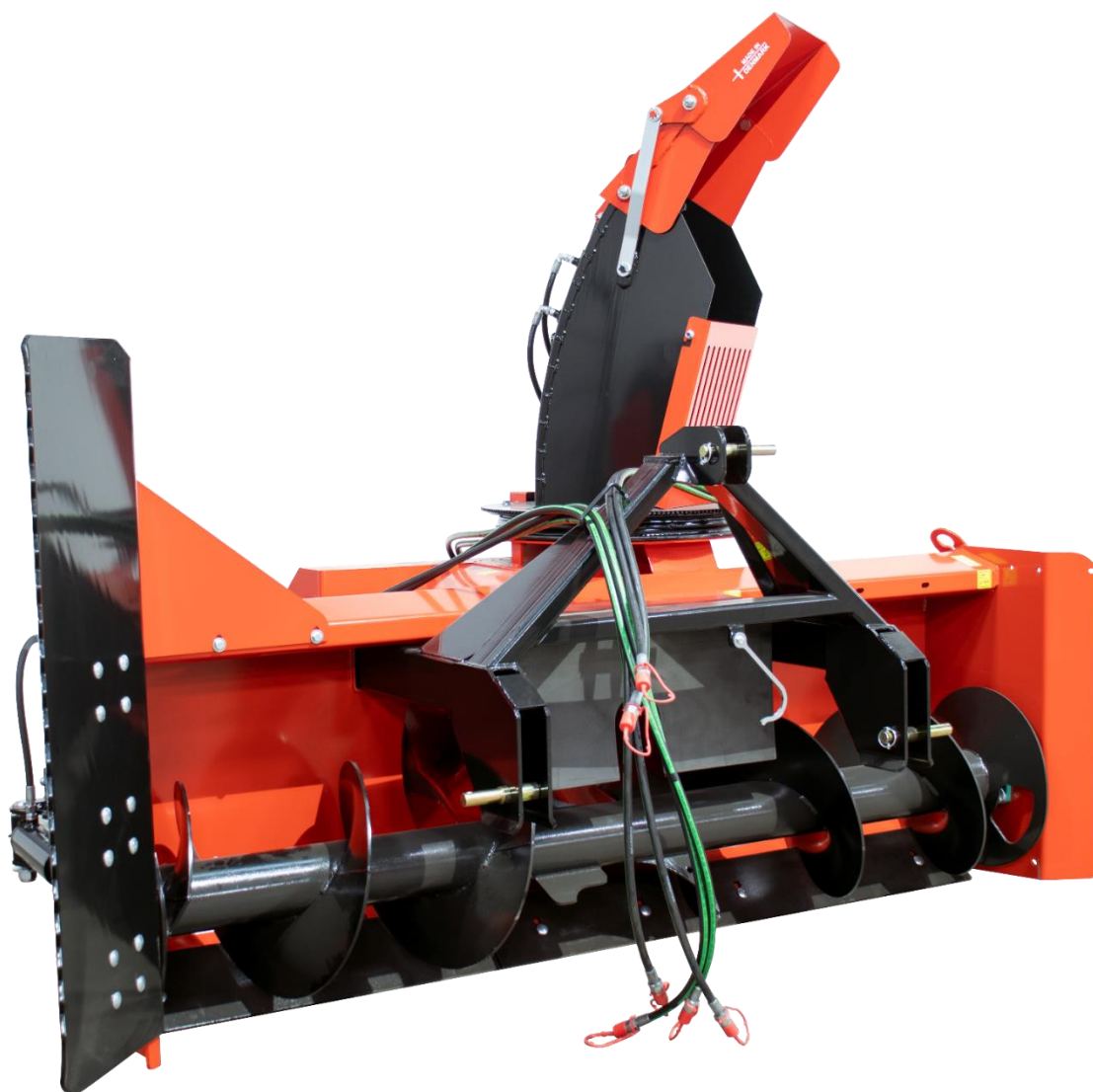




# Manual

GB






Snow blower




TTS-240-1




TTS-240-3




TTS-265-1

TTS-265-3

 <b>Fransgård</b>	
Fredbjergvej 132, Denmark-9640 Farsø. <a href="http://www.fransgard.dk">www.fransgard.dk</a>	
<b>Model</b>	<b>TTS-240-1</b>
<b>Kg.</b>	<b>1035</b>
<b>KW</b>	<b>51</b>
<b>Serie nr.</b>	
 	
Made in Denmark	

 <b>Fransgård</b>	
Fredbjergvej 132, Denmark-9640 Farsø. <a href="http://www.fransgard.dk">www.fransgard.dk</a>	
<b>Model</b>	<b>TTS-240-3</b>
<b>Kg.</b>	<b>1050</b>
<b>KW</b>	<b>74</b>
<b>Serie nr.</b>	
 	
Made in Denmark	

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Fredbjergvej 132, Denmark-9640 Farsø. <a href="http://www.fransgard.dk">www.fransgard.dk</a>	
<b>Model</b>	<b>TTS-265-1</b>
<b>Kg.</b>	<b>1055</b>
<b>KW</b>	<b>51</b>
<b>Serie nr.</b>	
 	
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Fredbjergvej 132, Denmark-9640 Farsø. <a href="http://www.fransgard.dk">www.fransgard.dk</a>	
<b>Model</b>	<b>TTS-265-3</b>
<b>Kg.</b>	<b>1070</b>
<b>KW</b>	<b>74</b>
<b>Serie nr.</b>	
 	
Made in Denmark	

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## Technical data

..... **TTS-240**

Width .....appr. 2400 mm

No. of blades on the auger fan.....4 pcs.

Diam. fan..... 850 mm.

Screw/Auger diameter .....500 mm.

Length of snow discharge .....0 – 30 mtr.

Turning angle of chute .....360 degrees

Weight ..... 1.035 / 1.050 kg

Power requirement.....ca.51 / 74 Kw.

Capacity..... 13-16 m3.

PTO rpm/min. .... 540 / 1000 omdr.min.

Three-point suspension.....Kat.II / III

**TTS-265**

appr.2650 mm.

4 pcs.

850 mm

500 mm

0 – 30 mtr

360 degrees

1.055 / 1.070 kg.

ca.51 / 74 Kw.

13-16 m3.

540 / 1000 omdr.min.

Kat.II / III

## Introduction

Fransgård machines are designed for professional users, who value high capacity and operational safety, and need to get the job done quickly and efficiently.

### **Fransgård snow blower is specifically designed to:**

Snow removal on roads and other asphalted areas, and is not to be used for any other purposes. If you are planning to use it for other purposes, please obtain prior consent by contacting Fransgård Maskinfabrik A/S on +45 98 63 21 22.

The work should be performed under reasonable conditions, e.g. on roads cleared of foreign objects.

To ensure the proper use of the machine, follow the factory's instructions for preparation, operation and maintenance of the machine, or contact an authorised repair centre when necessary.

### **General information about the machine**

#### **Stop the tractor engine and remove the ignition key before you touch the machine.**

Always remember to stop the tractor engine before you lubricate or carry out adjustments, maintenance or repairs. Also remove the ignition key so you can be safe that no one will start the tractor accidentally before you have terminated work on the machine.

#### **Remember:**

Do not allow anyone to be positioned under the machine while it is still mounted on the tractor.

#### **Children**

Never allow children near the machine while it is in operation. Younger children, especially, have a tendency to do unpredictable things.

#### **Under no circumstances may anyone approach or remain near the machine while it is running.**

#### **Danger of clamping while the machine is mounted**

Do not allow anyone between the machine and the tractor when the machine is mounted on the tractor. An unpredictable movement could cause damage on a person between the machine and the tractor. Improper use can also lead to serious injury.

**Max. 175 bar**

Ensure that the hydraulic components are not subjected to more than a maximum of 175 bar (2540 psi), as higher pressures could cause components to explode. This could result with both you and others being hit by metal parts at high speed or burnt with hot oil under high pressure.

**Requirements for the tractor**

If the driver's cab cannot be closed completely, the tractor driver should use ear muffs.

To keep full control of the tractor in all conditions, at least 20% of the tractor's total weight should rest on the front axle.

Since tractor specifications vary widely between tractor brands, in the worst case it may be necessary to adjust the weight distribution with a pair of front weights.

The tractor's PTO must operate at 540/1000 rev/min and the drawbars must be Cat. 3.

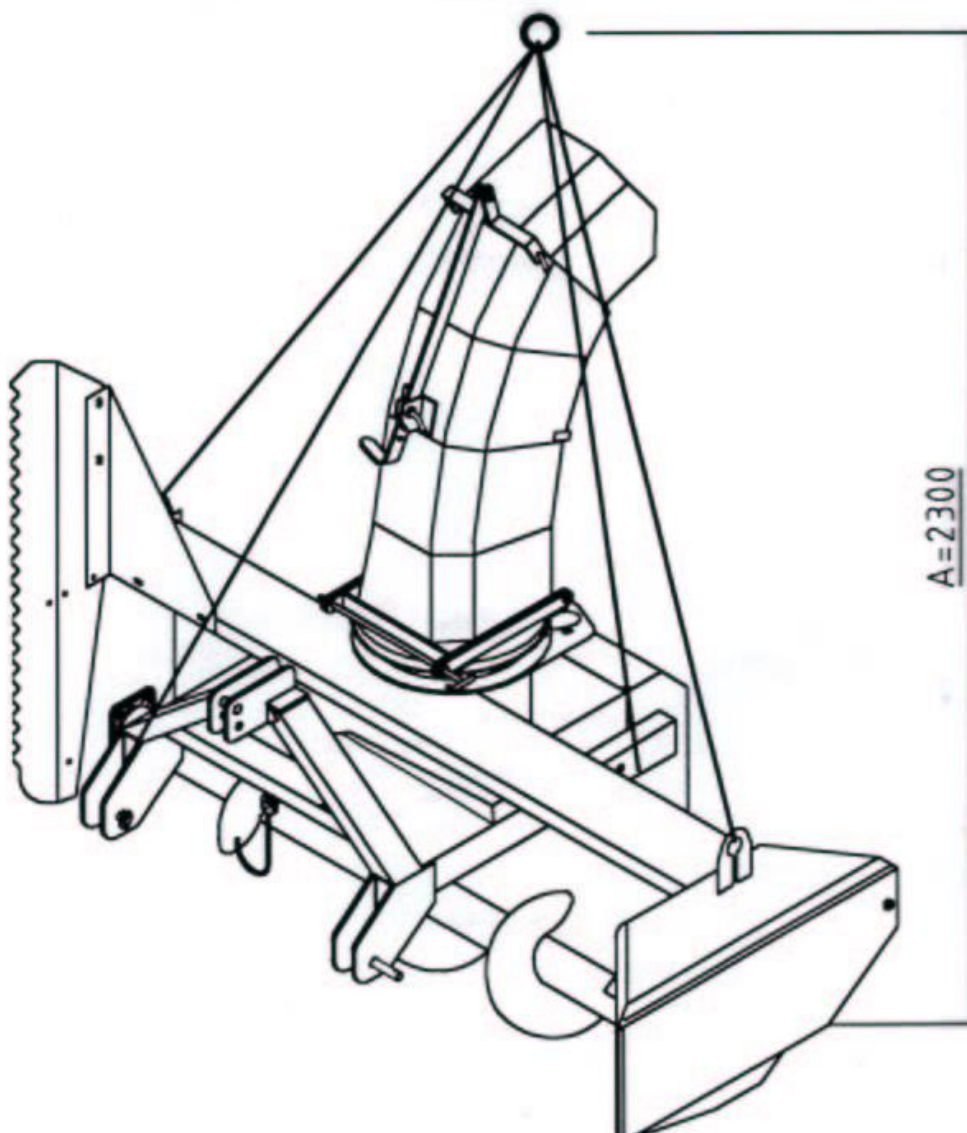
The tractor must be equipped with at least one double-acting hydraulic outlet with ½" female coupling, max. 175 bar (2540 psi).

## Transport

The machine may only be moved as illustrated in the drawing.

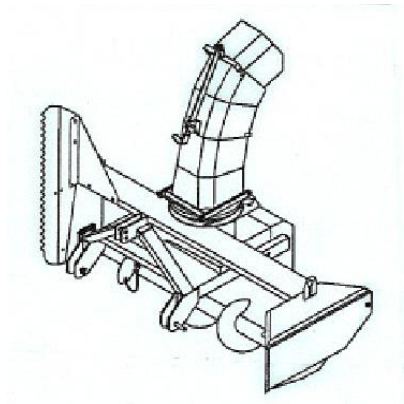
A	:	2300 mm
Vægt	:	ca.1050 kg

A	:	2300 mm
Vægt	:	ca.1070 kg



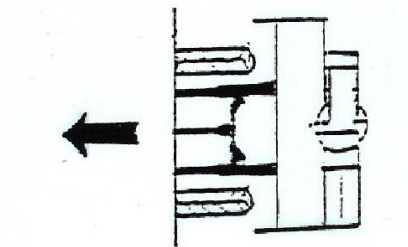
## Mounting

Mount the chute on the swivel rim.



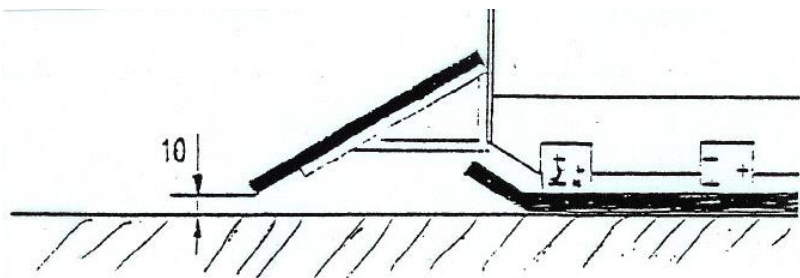
### Mounting the machine

The tractor's engine must be off when you mount and dismount the machine to the tractor. Always check that there is no one between the tractor and the machine while mounting and dismounting. An unexpected movement with the tractor may trap people between the tractor and the machine.



Move the tractor up to the snow blower, stop the tractor engine and mount the tractor's drawbars in the three-point suspension and the top link in the three-point suspension's top link bracket.

Adjust the top link so that the machine is standing on the slide/skid shoes and the tips of the wear plate are approx. 10 mm (.375") from the ground.



Mount the hydraulic hoses in the tractor's hydraulic plugs and return oil ports.

Check that all hydraulic connections are tight and that all hoses and fittings are undamaged before activating the hydraulic system. After stopping the tractor engine, also check that the hydraulic hoses are unpressurised. You can do this by activating the hydraulic system.



Under pressure, hydraulic oil can pierce the skin and cause serious infections. Always protect your skin and eyes from oil spray. If you accidentally are hit by pressurised hydraulic oil, seek medical attention immediately.

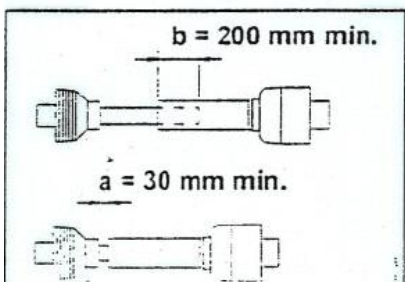
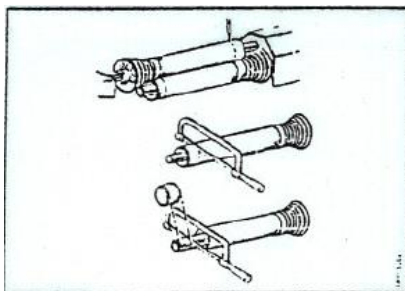
Mount the tractor's power take-off (PTO). Fasten the safety chain on the snow blower.

**NB.** There must always be a cut-out/shear-bolt clutch on the PTO shaft, max. torque 3,500 Nm. The use of any PTO shaft not approved by Fransgård Maskinfabrik A/S invalidates all warranty and liability obligations.

There should be no bystanders during start-up, since any air in the hydraulic system can lead to sudden movements.

Remember! The machine **MUST NOT** be operated with torn or damaged PTO safety shields. Inspect and replace the PTO safety shields as required.

When mounting the PTO shaft, check the following before you start the machine:



- The shaft must be of a size and quality that is approved by Fransgård Maskinfabrik A/S. If in doubt, please contact the dealer/importer.
- Make sure the shaft's safety shield is intact and the two halves of the PTO can move freely in each other.
- Carefully adjust the length of the PTO shaft. If the shaft is too long, it will destroy the blower's gearbox. If you have cut the shaft, file the ends of the tube sections until they slide smoothly into each other without scraping. Remember to lubricate, and to refer to the user manual for instructions on the PTO shaft.
- Check that the PTO shaft can be turned by hand, to ensure that it does not scrape against anything.



- Check that the PTO shaft is not jammed or binding when the machine is at max. and min. lifting height, and note that when the blower is back-end mounted, the tractor sits higher off the ground than the blower. Also note that with very short PTO shafts, the angle of the shaft can become too steep (maximum 30 degrees). In this case, contact your supplier/importer.

**To dismantle, follow the mounting instructions in reverse.**

### ***Mounting extra equipment***

#### **Mounting the edger:**

- Mount as illustrated in the spare parts pages.

#### **Mounting the hydraulic regulation of the chute flap:**

- Mount as illustrated in the spare parts pages.
- Use a set of double-acting outlets mounted with ½" female coupling.
- Remember to tighten the hydraulic components to prevent oil spills.

#### **Mounting long loading chute:**

- Mount as illustrated in the spare parts pages.
- When mounting the long loading chute, it is very important that the bolts are very tight. Check this frequently.
- It is also important that the operator can see the spout on the end of the high chute.

## Mounting the crude oil (diesel) engine:

- Mount as illustrated in the spare parts pages.
- Before mounting the crude oil/diesel engine kit on the snow blower, it is important to check that the technical specifications are in accordance with the requirements of Fransgård Maskinfabrik A/S, e.g. oil quantity (litres/min) and oil pressure (bar). See technical data. Be aware that power is reduced during oil-based operation.
- When mounting the crude oil (diesel engine) control panel, it is important to check that the clutch and the oil engine are placed in line with the transmission shaft before drilling a hole. This is to avoid unnecessary wear and tear.

## Starting the machine

The snow blower is supplied ready for operation from the factory, i.e. lubricated and with oil in the gearbox:

TTS-250-1: 2.2 L

TTS-250-3: 3.2 L

Type: TEXACO MEROPA 320 or  
MOBIL GEAR 632.

However, it is important to check the PTO of the tractor or the implement carrier to ensure that the PTO's rotational speed is correct for the rotation of the snow blower.

Also, make sure that the snow blower's PTO shaft is the correct length in relation to the tractor.

The PTO shaft's rotation speed must be max. 540/1000 rev./min.

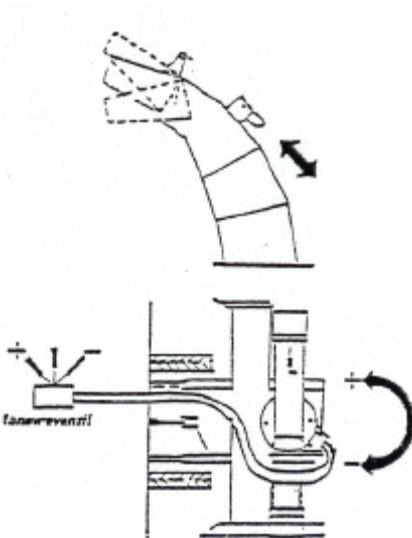
The angle of the PTO shaft cannot be above 15° at constant working load.

Manually adjust the flap on the chute as desired.

Position the chute on the desired side with the help of the tractor's manoeuvring valve.

Connect the tractor's PTO and set it to 540/1000 O/Min.

The working speed must be adapted to the different conditions with regard to snowfall and/or snow type.



## Dismounting

After use, dismount the machine as follows:

### **REMEMBER!**

The tractor's PTO must always be disconnected when you work with the machine and the PTO shaft.

- Place the machine on an even surface.
- Disconnect the hydraulic hoses.
- Disconnect the PTO shaft and hang it on the hook.
- Pull out the locking pins.
- The machine is now disconnected and can be left as it is.

## Maintenance

Warning: During repair, maintenance and cleaning, it is particularly important to ensure personal safety. When the machine is mounted on the tractor, always park the tractor in accordance with the current traffic rules.

Important: screws, nuts, nipples and bolts on the new machine must be tightened after two hours of operation. In addition, all moving parts must be lubricated with grease.

Change the oil in the gearbox after the first 50 hours of operation. Then change it after every 500 hours of operation, at least once a year and before storage, as condensation can destroy the gearbox. If it needs oil, fill it with

TEXACO MEROPA 320 or

MOBIL GEAR 632. Do not overfill, as this can destroy the gearbox.

When lubricating or doing maintenance, make sure that the machine is standing on the slide shoes or supported by pedestals.

Lubricate the machine's grease nipples regularly. Clean the hydraulic couplings on the tractor and the snow blower with a clean cloth before coupling.

Never attempt to clean, lubricate or adjust the machine UNLESS the tractor engine is stopped and the parking brake is activated.

To extend the machine's service life, we recommend that you clean the machine often and thoroughly.

After use, clean the snow off the machine, as any frozen snow can cause problems with starting the machine next time.

Remember: Do not spray water directly into the bearings or bearing housings. Before long-term storage of the machine, it is recommended that you spray acid-free oil on it.

**When the season is over, clean the machine and spray it with acid-free oil.**

## **Lubrication**

Grease: always ensure the machine is properly lubricated before you start to use it.

Type of grease: good-quality universal grease.

Lubricate mechanical connections with grease or oil as needed.

## **Storage**

Ensure the following before storing the machine:

Clean the machine thoroughly and lubricate it with acid-free oil.

- ◆ Lubricate all grease nipples
- ◆ Repair any paintwork damage
- ◆ Park the machine horizontally and make sure the implement does not leak oil or grease.
- ◆ Park the machine in a dry place and protect it from the elements.

## Safety

The machine may only be operated by trained staff. Read this manual before connecting the machine to the tractor. Even if you have used a similar machine before, please read the manual. It concerns your own and others' safety.

The snow blower is a one-man operated machine. The operator must ensure that there are no persons in the machine's work area, especially children. Do not leave the machine in someone else's care unless you are sure they have the necessary knowledge needed to operate the machine safely.

The operator should be familiar with the precautions.

- Activate the tractor's parking brake and stop the tractor's engine before you:
- lubricate the machine
- clean the machine
- remove any part of the machine
- adjust, repair or perform maintenance on the machine
- Always lower the machine to the ground or activate the transportation safety fittings each time you park the machine
- Never work under a raised unit unless it is secured with a wheel chock or another mechanical safety device.
- Do not start the tractor until all bystanders are at a safe distance from the machine
- Check that all tools are removed from the machine before starting up.
- Ensure all covers and shields are correctly fitted.
- Do not work in loose-fitting clothes that could be pulled into a moving part on the machine.
- Always use the legally required lighting and safety signs during transport on public roads and when driving in the dark.
- Do not stand near the machine when it is operating.
- If the noise from the machine bothers you, wear ear muffs.

- Before raising or lowering the machine, check that there are no people near the machine.
- Do not use the machine for any other work than it was designed for.
- Do not stand between the tractor and the machine during mounting and dismounting.
- Only original spare parts should be used.
- Do not sit on the machine while it is being driven.
- During repairs or lubrication, the PTO shaft and/or the hydraulic hoses must be disconnected.

All safety rules and regulations in the country of use must be respected. The tractor's user manual must also be followed.

The machine may only be used to remove snow. If you wish to use the machine for other purposes, please contact Fransgård Maskinfabrik A/S, Denmark + 45 98 63 21 22.

## **Driving hazards**

It is the user's responsibility to ensure that no other persons are exposed to danger when operating the snow blower. Consideration should be given to people or animals in the vicinity of the machine, since there may be stones and other objects in the snow. The chute on the machine should be adjusted so that the snow that is discharged from the machine does not pose a danger to other road users.

## **Disposal**

When the machine's service life has expired, it should be handed over to an approved breaker in the country of use.

If there are still oil products in the machine, these should be removed and discarded according to the laws in the country of use.

## **Ordering spare parts**

When ordering spare parts, state the model type designation, serial number and year of manufacture. This information can be found on the data plate. It is recommended that you note this information on the first page of the spare parts catalogue (supplied) as soon as possible after delivery, so you have the details to hand when you need to order parts.













